



## MARYLAND Department of Health

### **Public Health Preparedness and Situational Awareness Report: #2019:11**

Reporting for the week ending 03/16/19 (MMWR Week #11)

**March 22, 2019**

#### **CURRENT HOMELAND SECURITY THREAT LEVELS**

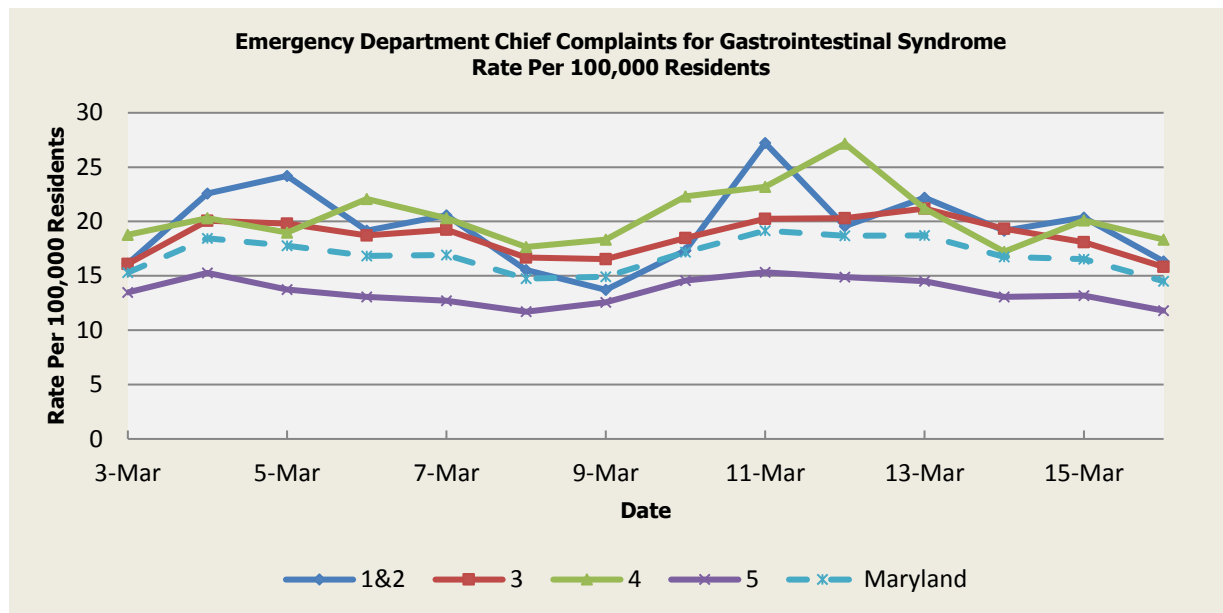
<b>National:</b>	<b>No Active Alerts</b>
<b>Maryland:</b>	<b>Normal (MEMA status)</b>

### **SYNDROMIC SURVEILLANCE REPORTS**

**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):** Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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## Gastrointestinal Syndrome



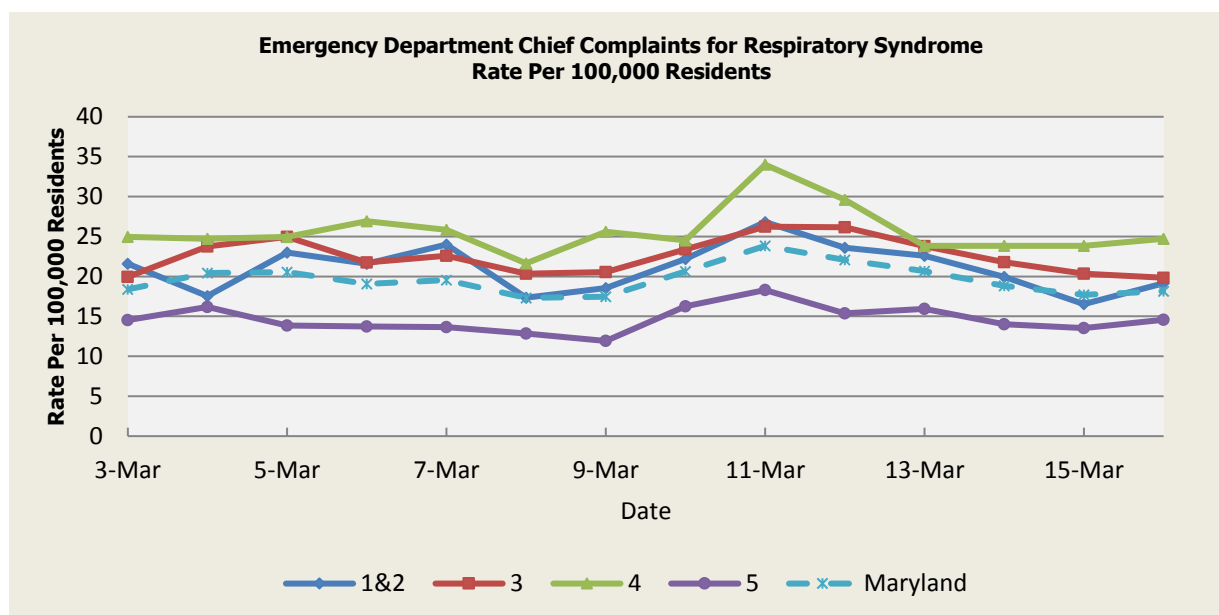
There were three (3) Gastrointestinal Syndrome outbreaks reported this week: three (3) outbreaks of Gastroenteritis in Assisted Living Facilities (Regions 3,5).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.16	15.08	15.83	10.19	13.10
Median Rate*	13.11	14.83	15.24	10.08	12.97

\* Per 100,000 Residents

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## Respiratory Syndrome



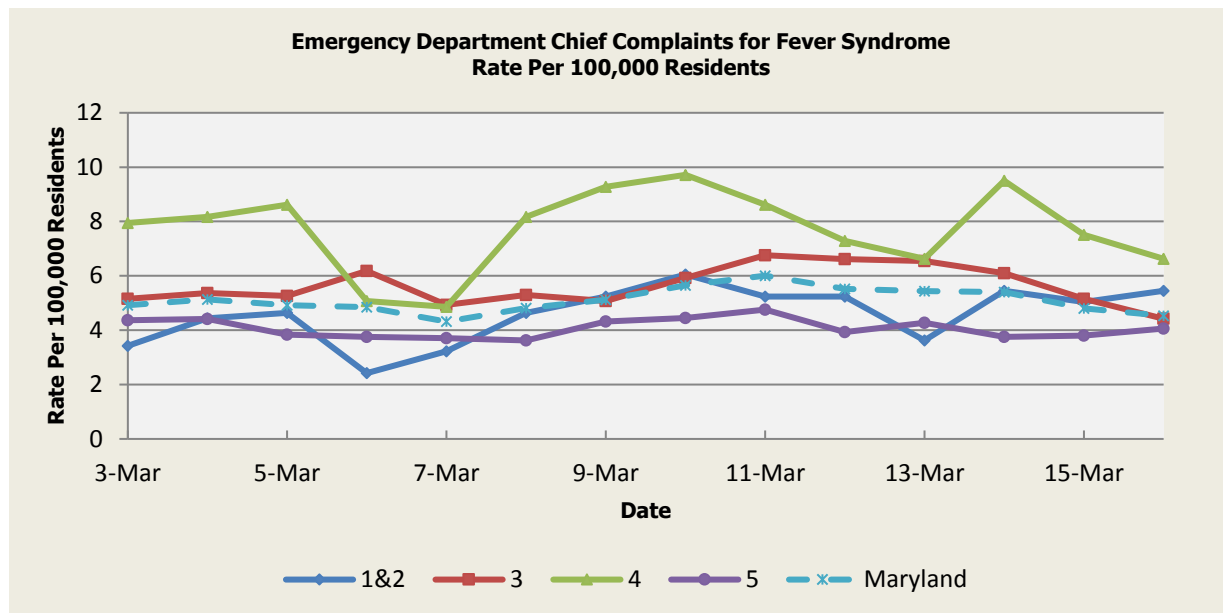
There were ten (10) Respiratory Syndrome outbreaks reported this week: three (3) outbreaks of Influenza in Nursing Homes (Region 3); two (2) outbreaks of Influenza associated with Schools (Regions 3,4); one (1) outbreak of Influenza associated with a Daycare Center (Region 5); one (1) outbreak of Influenza in a Treatment Center (Regions 1&2); two (2) outbreaks of ILI/Pneumonia in Nursing Homes (Regions 1&2,3); one (1) outbreak of ILI associated with a School (Region 4).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.61	14.70	15.02	9.97	12.74
Median Rate*	12.10	14.14	14.35	9.60	12.23

\* Per 100,000 Residents

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## Fever Syndrome



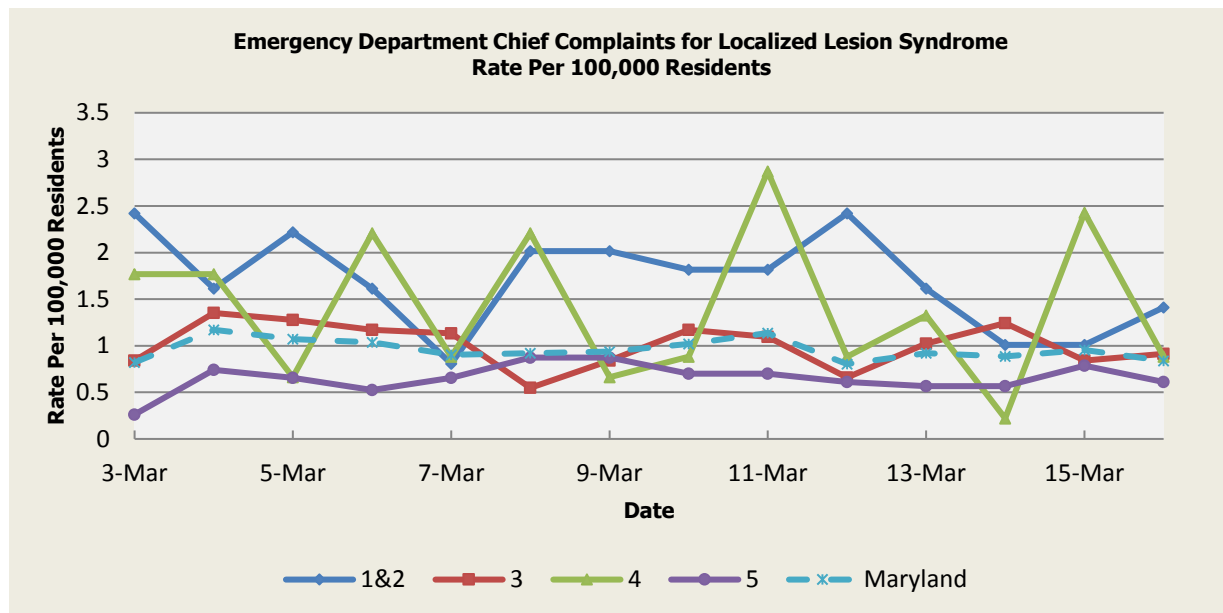
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.05	3.89	4.08	3.03	3.51
Median Rate*	3.02	3.76	3.97	2.92	3.38

*\*Per 100,000 Residents*

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## Localized Lesion Syndrome



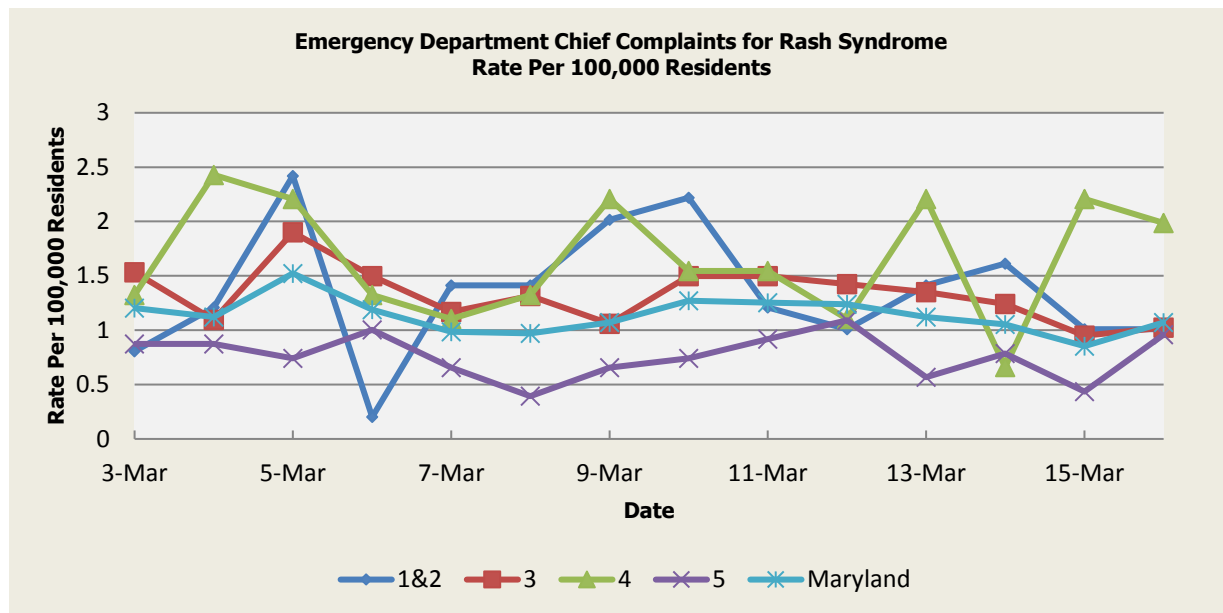
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.10	1.81	2.04	0.91	1.42
Median Rate*	1.01	1.75	1.99	0.87	1.37

\* Per 100,000 Residents

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## Rash Syndrome



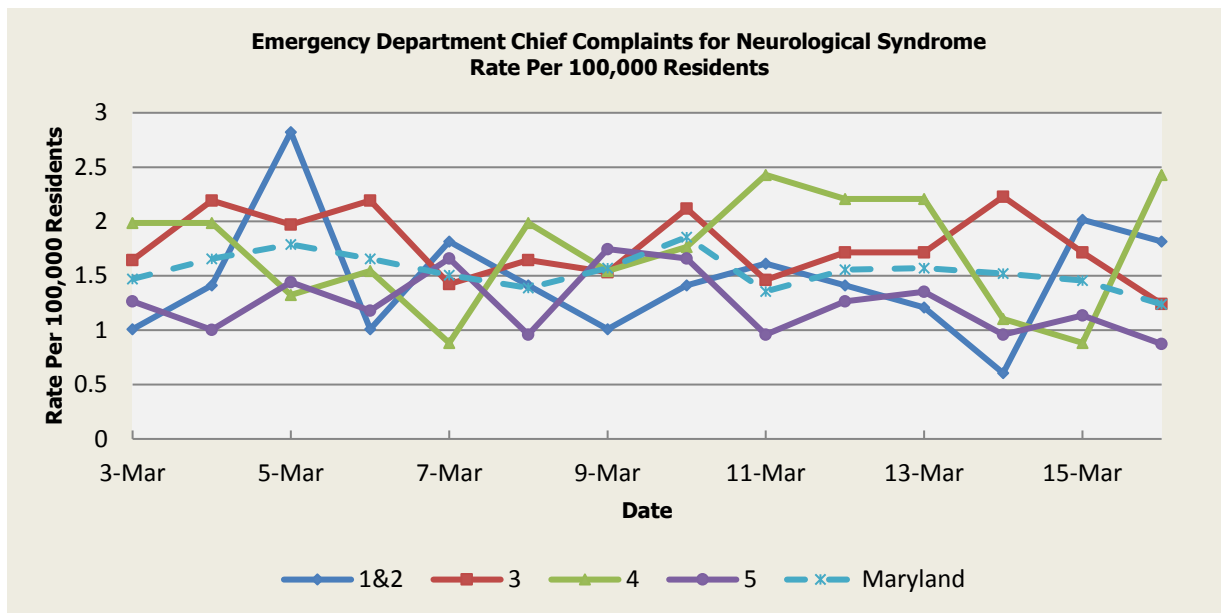
There were no Rash Syndrome outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.68	1.77	0.98	1.38
Median Rate*	1.21	1.61	1.77	0.96	1.32

\* Per 100,000 Residents

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## Neurological Syndrome



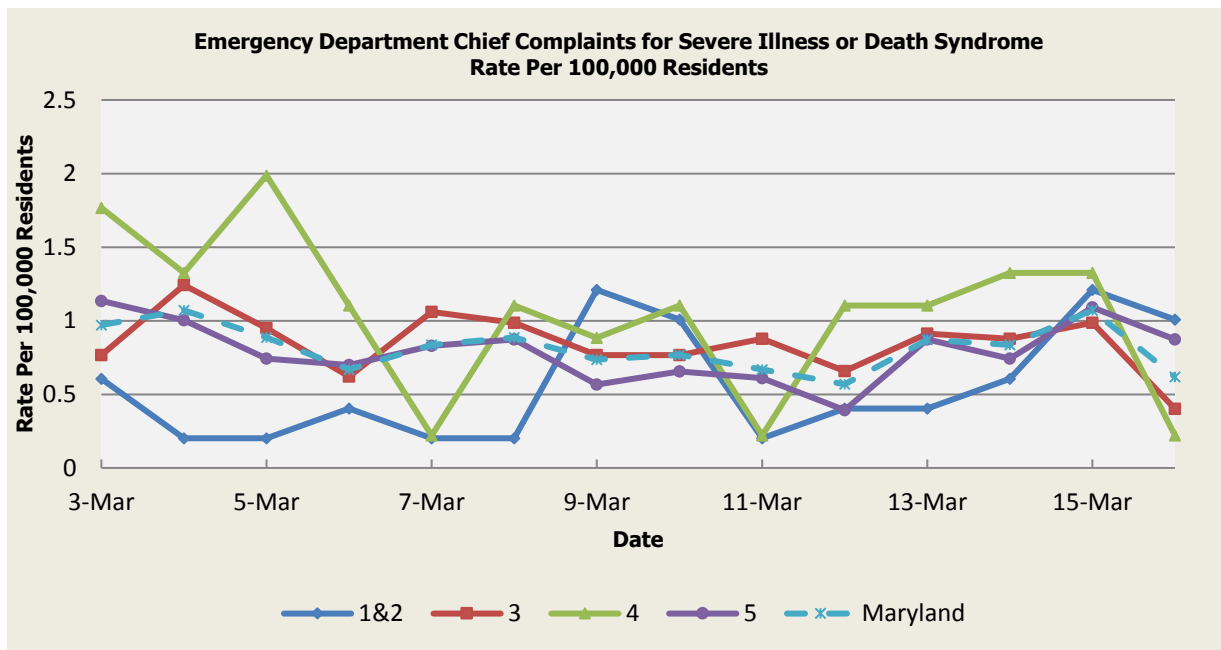
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.76	0.92	0.83	0.58	0.77
Median Rate*	0.60	0.80	0.66	0.52	0.67

\* Per 100,000 Residents

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## Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.90	0.83	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

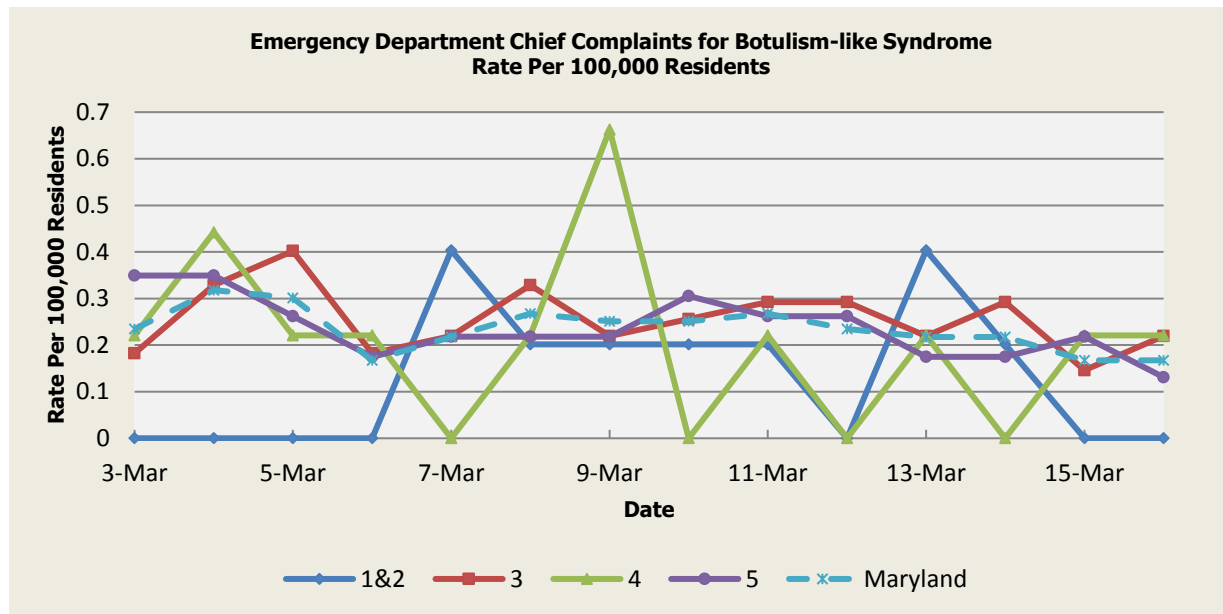
\* Per 100,000 Residents

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## **SYNDROMES RELATED TO CATEGORY A AGENTS**

### **Botulism-like Syndrome**



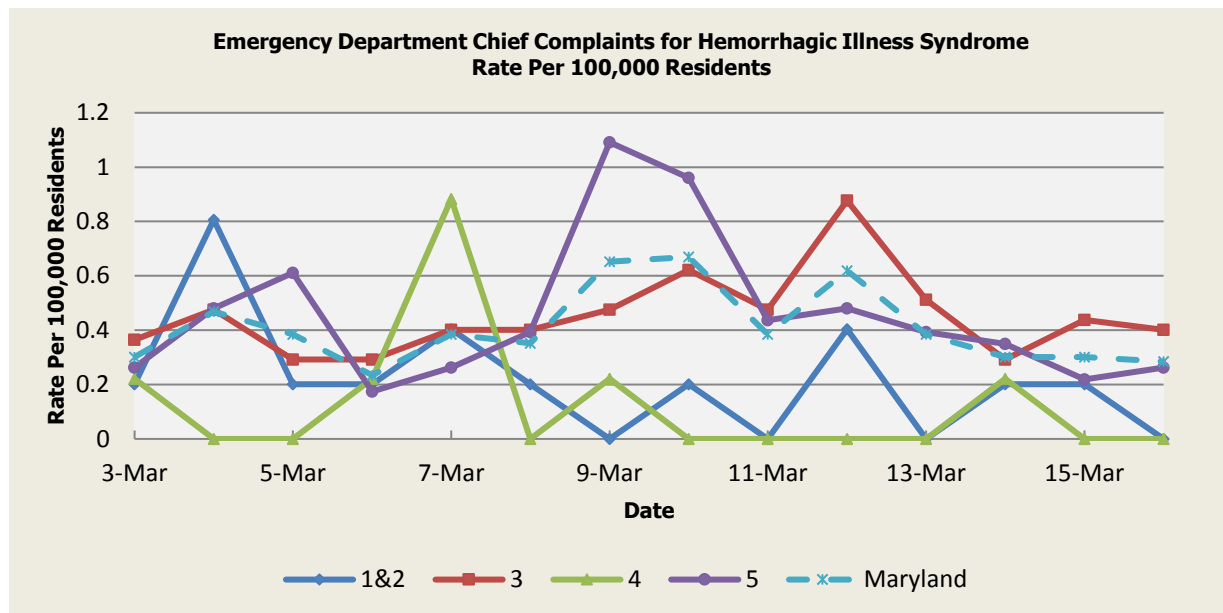
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 3/3 (Regions 4,5), 3/4 (Regions 3,4,5), 3/5 (Regions 3,4,5), 3/6 (Regions 4,5), 3/7 (Regions 1&2,5), 3/8 (Regions 1&2,3,4,5), 3/9 (Regions 1&2,4,5), 3/10 (Regions 1&2,3,5), 3/11 (Regions 1&2,3,4,5), 3/12 (Regions 3,5), 3/13 (Regions 1&2,4,5), 3/14 (Regions 1&2,3,5), 3/15 (Regions 4,5), 3/16 (Regions 4,5). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.12	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

\* Per 100,000 Residents

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## Hemorrhagic Illness Syndrome



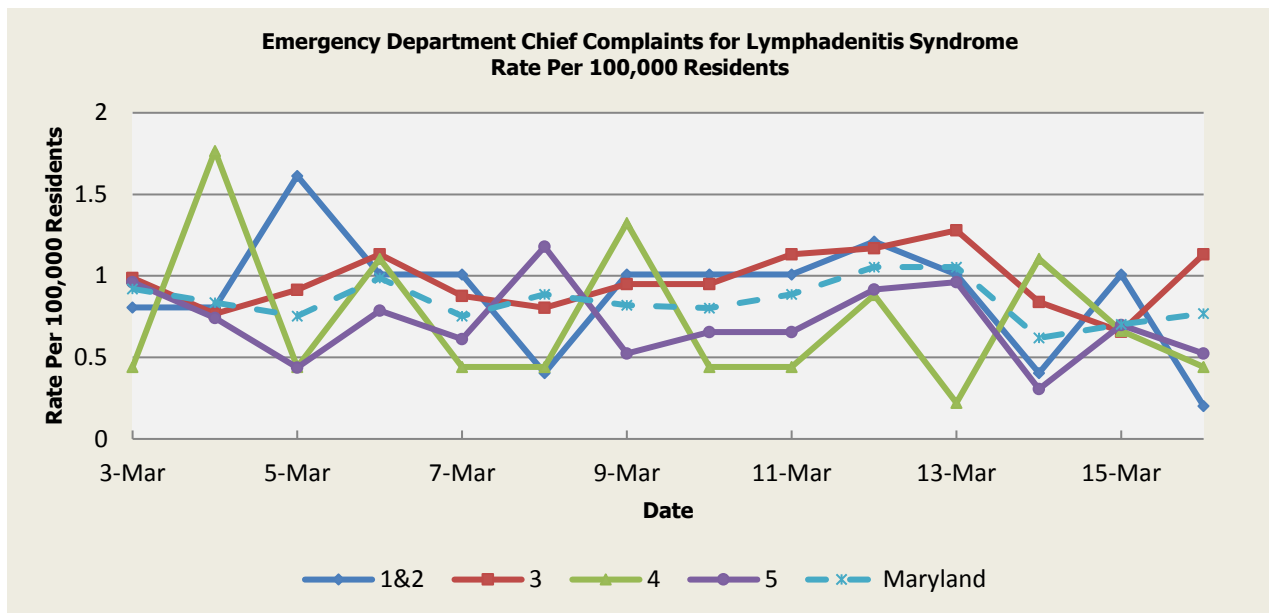
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 3/3 (Regions 1&2,3,4,5), 3/4 (Regions 1&2,3,5), 3/5 (Regions 1&2,5), 3/6 (Regions 1&2,4), 3/7 (Regions 1&2,3,4,5), 3/8 (Regions 1&2,3,5), 3/9 (Regions 3,4,5), 3/10 (Regions 1&2,3,5), 3/11 (Regions 1&2,3,5), 3/12 (Regions 1&2,3,5), 3/13 (Regions 3,5), 3/14 (Regions 1&2,4,5), 3/15 (Regions 1&2,3). 3/16 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.15	0.04	0.12	0.12
Median Rate*	0.00	0.07	0.00	0.04	0.07

\* Per 100,000 Residents

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## Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 3/3/ (Regions 1&2,5), 3/4 (Regions 1&2,4,5), 3/5 (Regions 1&2), 3/6 (Regions 1&2,4,5), 3/7 (Regions 1&2), 3/8 (Region 5), 3/9 (Regions 1&2,4), 3/10 (Regions 1&2), 3/11 (Regions 1&2), 3/12 (Regions 1&2,3,4,5), 3/13 (Regions 1&2,3,5), 3/14 (Region 4), 3/15 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.35	0.57	0.39	0.37	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.40

\* Per 100,000 Residents

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## **MARYLAND REPORTABLE DISEASE SURVEILLANCE**

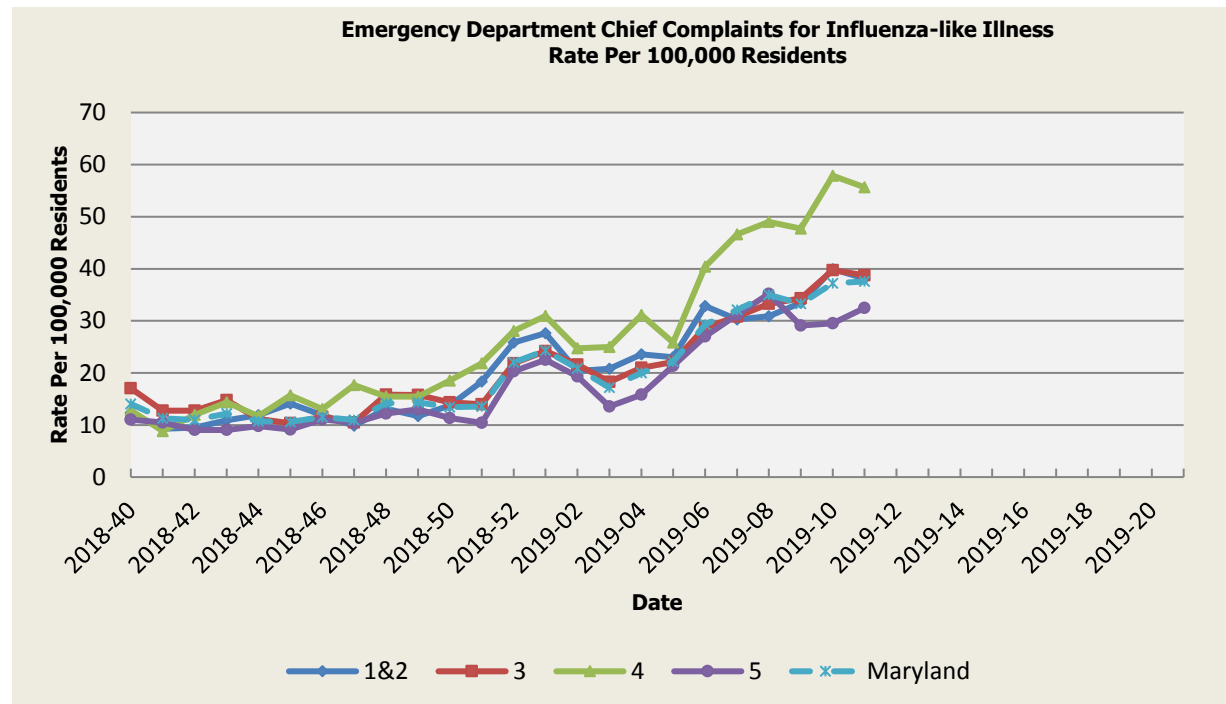
Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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## **SYNDROMIC INFLUENZA SURVEILLANCE**

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 11 was: Moderate Intensity.

### **Influenza-like Illness**

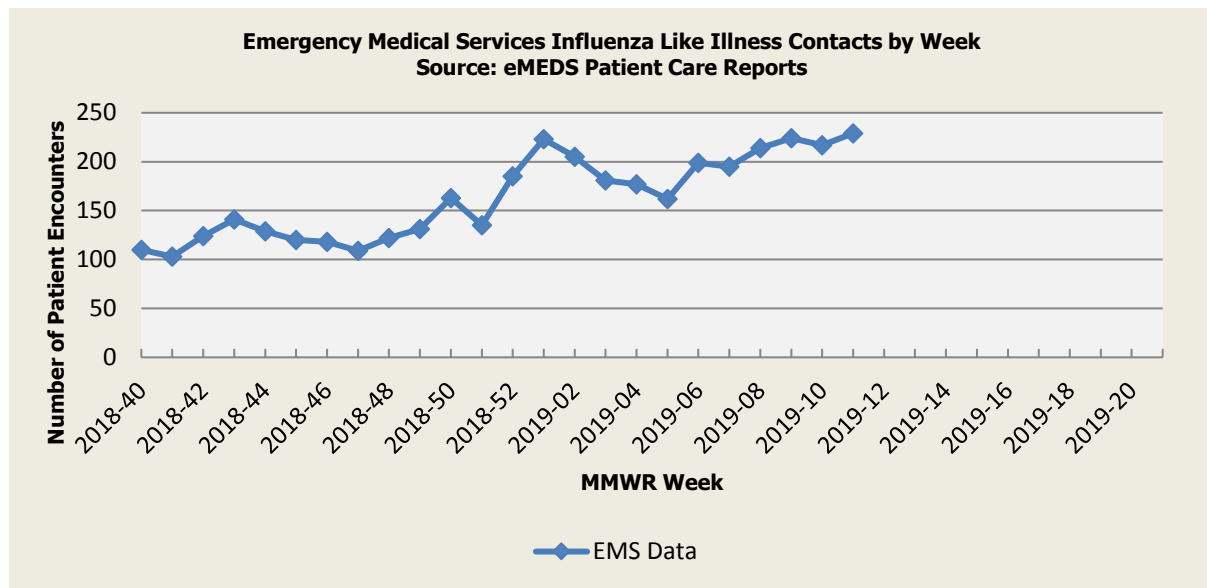


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	10.08	13.25	12.78	11.24	12.18
Median Rate*	7.66	10.19	9.27	8.64	9.23

\* Per 100,000 Residents

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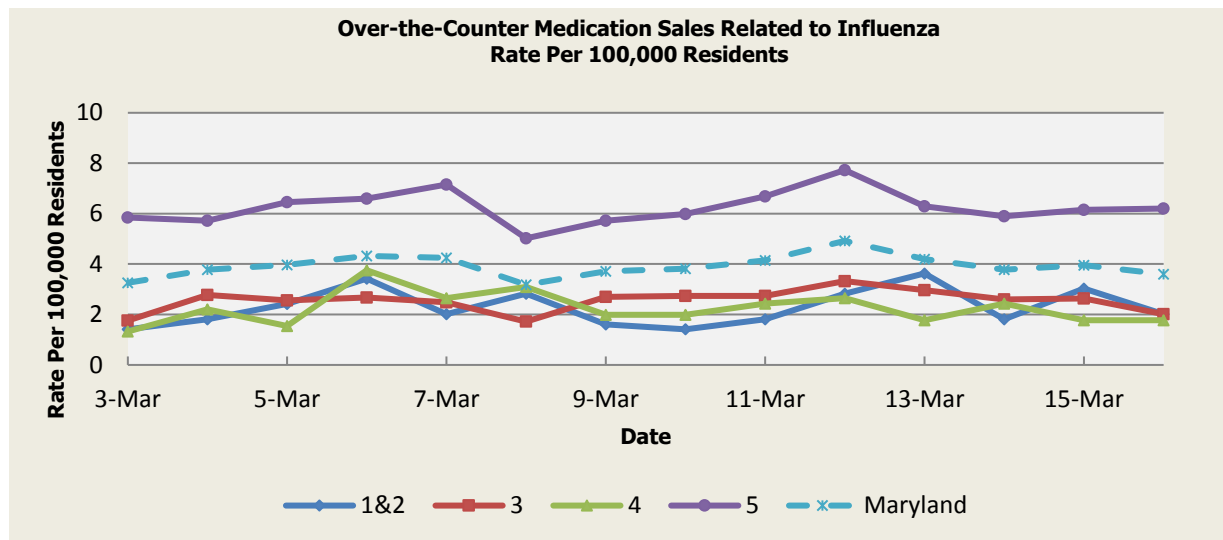
## Influenza-like Illness Contacts by Week



**Disclaimer on eMEDS flu related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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## Over-the-Counter Influenza-Related Medication Sales



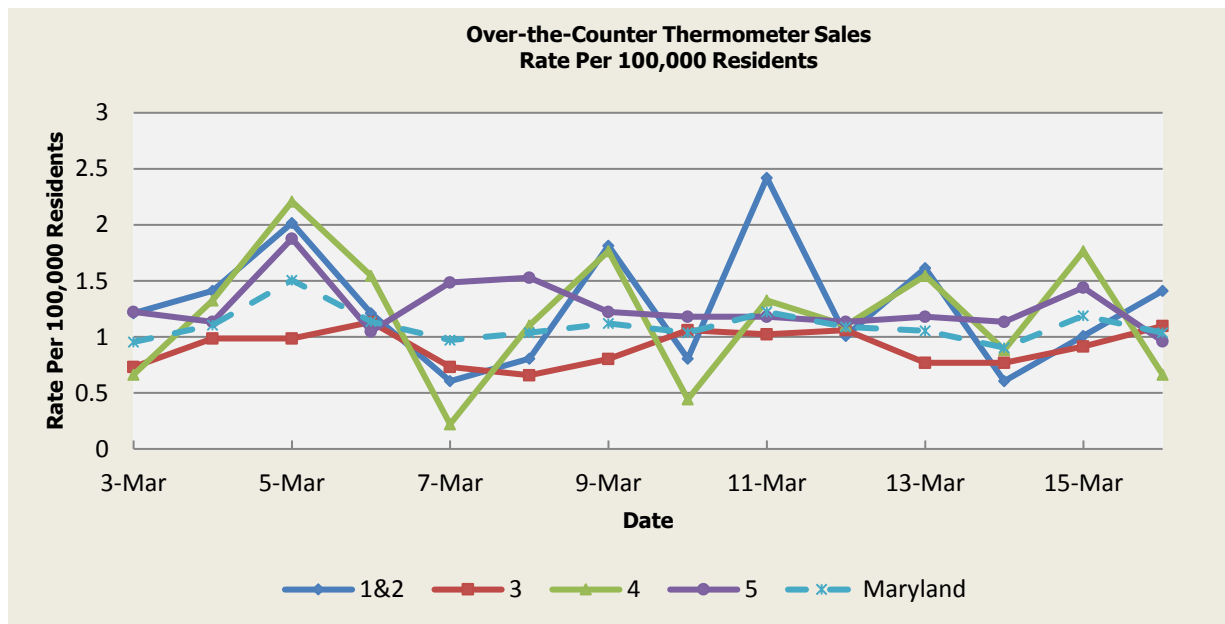
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.60	4.65	2.74	8.08	5.73
Median Rate*	2.82	3.84	2.43	7.42	5.02

\* Per 100,000 Residents

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## Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.09	2.94	2.33	3.91	3.28
Median Rate*	2.82	2.78	2.21	3.75	3.15

\* Per 100,000 Residents

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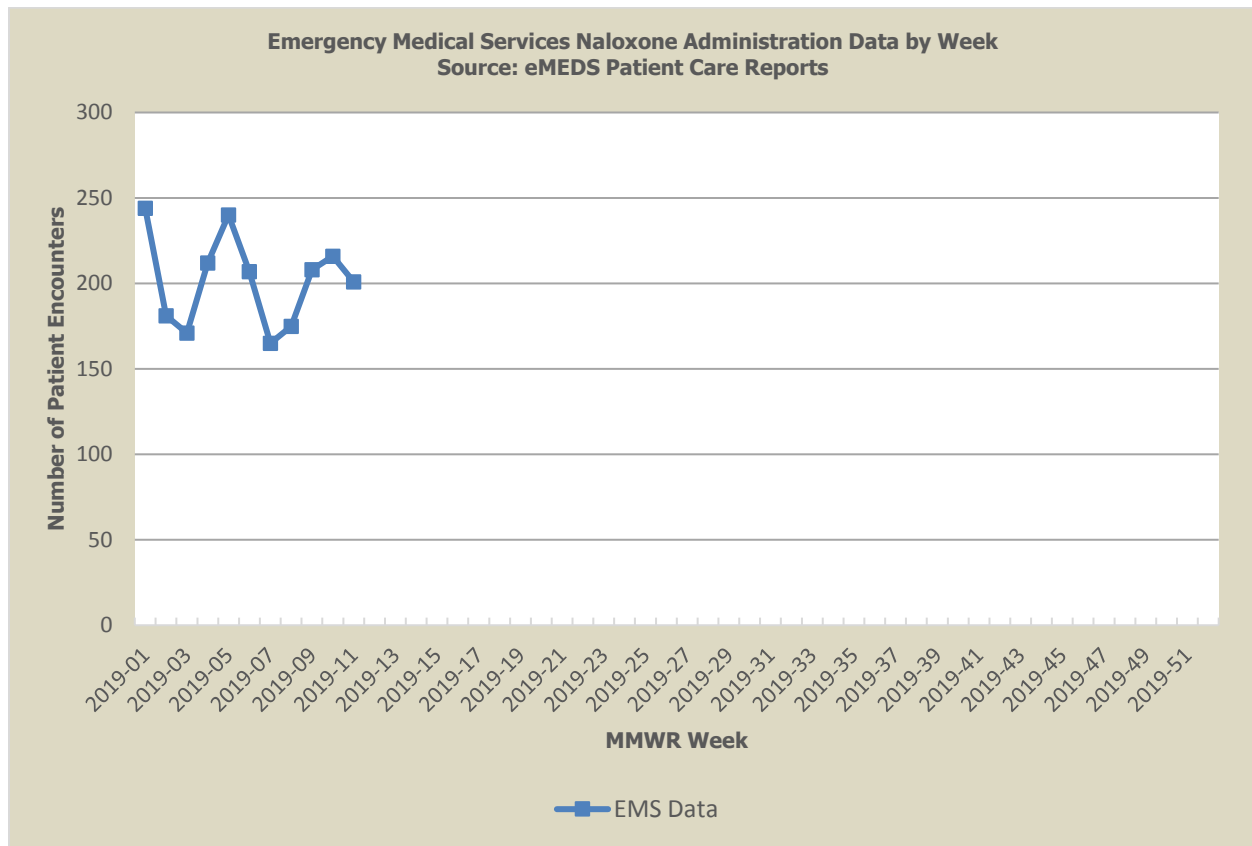
## **SYNDROMIC OVERDOSE SURVEILLANCE**

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

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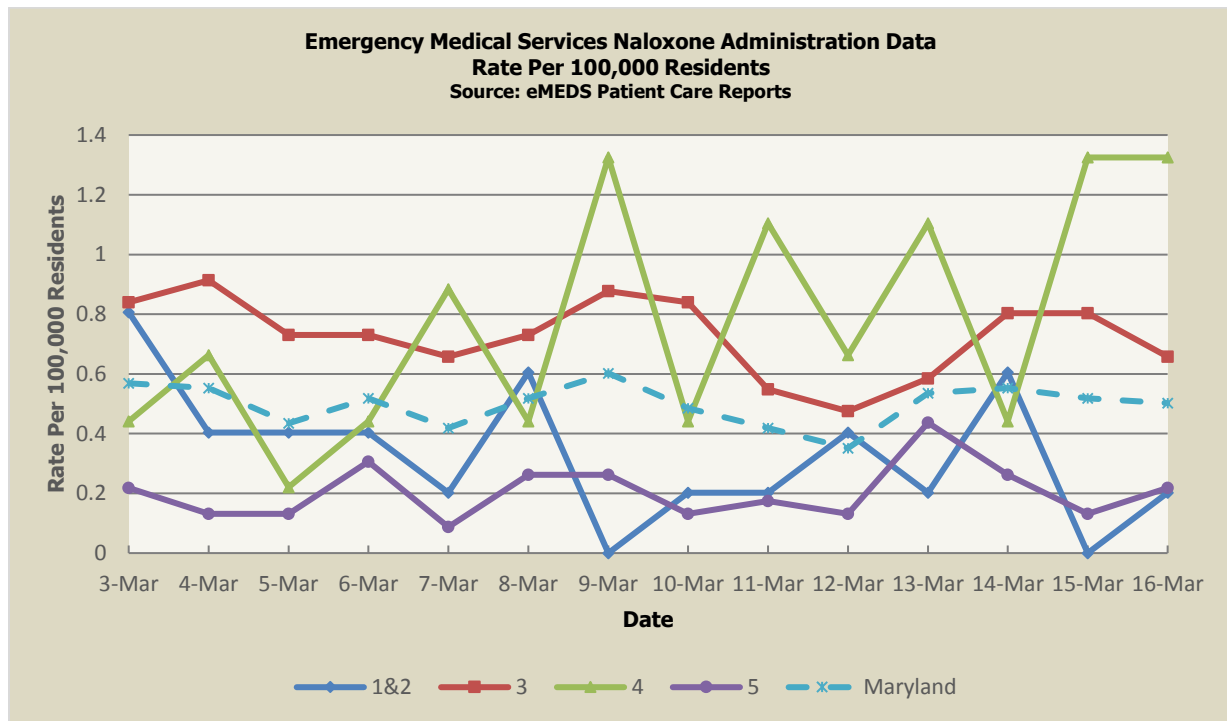
## Naloxone Administration Data by Week



**Disclaimer on eMEDS naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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## Naloxone Administration Data



**Disclaimer on eMEDS Naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase:** This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of March 21, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

## **AVIAN INFLUENZA**

*There were no relevant avian influenza reports this week.*

## **HUMAN AVIAN INFLUENZA**

*There were no relevant human avian influenza reports this week.*

## **NATIONAL DISEASE REPORTS**

**SHIGELLOSIS (GUAM),** 19 Mar 2019, The Department of Public Health and Social Services is monitoring an outbreak of shigellosis on Guam. Shigellosis is an infectious disease caused by a group of bacteria called *\_Shigella\_*. Most who are infected with *\_Shigella\_* develop diarrhea, fever, and stomach cramps starting a day or 2 after they are exposed to the bacteria. Read More: <http://www.promedmail.org/post/6375402>

## **INTERNATIONAL DISEASE REPORTS**

**SALMONELLOSIS (NORWAY),** 20 Mar 2019, More cases of salmonellosis have been reported in Norway with a link to imported dried fruit and coconut. *\_Salmonella\_ Agbeni* has been detected in several samples of the snack mixes. *\_Salmonella\_ Gamaba* was also found in 2

unopened packages from the same lot. The Norwegian Institute of Public Health (Folkehelseinstituttet) reported 32 confirmed and 7 possible \_Salmonella\_ Agbeni cases in an update from the 21 confirmed and 9 possible infections earlier this month [March 2019]. Read More: <http://www.promedmail.org/post/6377221>

**WEST NILE VIRUS (INDIA)**, 20 Mar 2019, As a 6-year-old boy undergoing treatment for West Nile fever died in Kerala's Mallapuram, the government on Tue 19 Mar 2019 reviewed the current situation, preparedness, and action taken to deal with the disease. According to a Union Health and Family Welfare Ministry official, this could be the 1st fatality due to the vector-borne disease reported from the country. Read More: <http://www.promedmail.org/post/6376591>

**NIPAH VIRUS (BANGLADESH)**, 17 Mar 2019, The 3 members of a family from Baliadangi upazila's [2nd-lowest tier of regional administration] Ujarmoni village in Thakurgaon [district] are suspected to have been infected with the deadly Nipah virus, reports United News of Bangladesh [apparently later confirmed as Nipah virus; see below. - Mod.TY]. The victims include a 28 year old mother; her son, aged 8; and her daughter, aged 4. They were taken to Rangpur Medical College Hospital on 14 March 2019, said ABM Maniruzzaman, the resident medical officer of Baliadangi Upazila Health Complex. He said the victims had been suffering from fever for the last 3 days. They also reported headache and vomiting. The trio was 1st taken to Thakurgaon Modern Sadar Hospital and later shifted to RMCH. Read More: <http://www.promedmail.org/post/6371754>

**HANTAVIRUS (URUGUAY)**, 16 Mar 2019, The departmental health director, Dr Jorge Mota, confirmed for Carmelo Portal the death in our city of a young 17 year old girl from [a] hantavirus [infection]. "In Colonia department, there are on average 3 cases per year. The evolution of the disease is in thirds. One-third of the [infected] people do not have notable symptoms; another third have serious symptoms, especially respiratory symptoms and ones in all the systems, but with adequate treatment, [the infected people] survive, sometimes with sequelae. There is another third that die. It is those few with the virus that die with an evolution so drastic, such as is the case of this girl, sadly," Dr Mota stated. Read More: <http://www.promedmail.org/post/6368540>

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR).

More data and information on influenza can be found on the MDH website:  
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):  
<http://flusurvey.health.maryland.gov>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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## Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

## Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

